

Recommendations for

MORE EFFECTIVE SCHOOL MILK PROGRAMS



Research Bulletin
777

AGRICULTURAL EXPERIMENT STATIONS OF ILLINOIS, INDIANA, IOWA, KENTUCKY, MICHIGAN, MINNESOTA, MISSOURI, NEBRASKA, NORTH DAKOTA, OHIO, SOUTH DAKOTA, WISCONSIN; UNITED STATES DEPARTMENT OF AGRICULTURE, COOPERATING.

**OHIO AGRICULTURAL
EXPERIMENT STATION**

WOOSTER, OHIO

This publication brings together recommendations resulting from the course of studies of school milk programs in the North Central States and Kentucky. A list of these studies appears on page 11. The following representatives from experiment stations and federal agencies participated in making these studies:

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ACKNOWLEDGMENTS

The studies from which this publication stems were undertaken as part of the North Central Regional Dairy Marketing Research Project, NCM-12. Funds for this project were made available through the Research and Marketing Act of 1946 (Regional research fund) and from the cooperating state agricultural experiment stations.

Acknowledgment is also due the Chicago Midwest Area Office of the Food Distribution Division, Agricultural Marketing Service, the state supervisors of school lunch and milk programs in the thirteen states, and the many school personnel who have contributed information and ideas.

Recommendations for

MORE EFFECTIVE SCHOOL MILK PROGRAMS

Milk is important in the well-balanced diet, especially in the diet of children. Nutritionists have repeatedly emphasized this fact. Many children however are not drinking enough milk. How to encourage them to do so still remains a vital problem.

School milk programs are one of the most effective means of coping with this problem. There is no question but that, when these programs are introduced into schools, such programs encourage children to drink more milk. A Wisconsin study, for example, found that about three-fourths of the milk drunk in schools represented additional milk consumption, and only one-fourth was a substitute for milk previously drunk at home.

It is still true, however, that not all children are getting an equal opportunity to benefit from these programs. Not all schools have milk programs while some that have do not operate them as effectively as they might.

Now that Congress, in the spring of 1956 passed legislation to continue the Special School Milk Program for another two years, it seems both desirable and timely to make recommendations that will enable school children to derive the most benefit from the programs. These recommendations have grown out of studies made by researchers in the North Central States and Kentucky.

KEEP THE PRICE LOW

Without exception, studies show that one of the most important ways to get more children to drink more milk in schools is to keep the price as low as possible. This price will depend upon the amount the school pays for milk, the margin it takes to cover the expense incurred in handling and serving milk, and whether it receives partial reimbursement for that milk by participating in one or both of the federal programs.

Participating in the Federal Programs

The two federal programs are the National School Lunch Program and the Special School Milk Program. The first partially reimburses the school for serving complete lunches, which include one-half pint of milk with each lunch. The second partially reimburses the school for serving milk alone.

A school may participate in one or both of these programs, provided it serves whole milk that meets state and local standards of sanitation and butterfat content and operates these programs on a non-profit basis. Some schools, of course, do not have the facilities to participate in the National School Lunch Program. No such obstacle prevents most schools from taking part in the Special School Milk Program.

By encouraging schools to serve milk, and at reduced prices, these programs improve the health of children. Research shows that average milk consumption per pupil is generally higher in schools that serve milk under the federal programs than in schools that serve milk outside those programs.

Taking a Small Margin

If the full benefits offered by the Special School Milk Program are to be obtained, the margin a school takes has to be kept at a minimum. Studies show that hundred of schools in the Midwest take margins of no more than 1 cent per half-pint on milk served alone. If such a margin fails to cover handling and serving costs, funds from other sources can be sought. Even if a school has a program not connected with the federal program, taking a small margin and operating on a nonprofit basis will promote greater milk consumption.

Getting a Low Price from the Dairy

To help keep the price paid to the dairy at a minimum, schools—particularly those in large cities—may find it desirable to request bids from dairies. Whether or not bids are involved, agreements ordinarily specify the services dairies are to perform and—in areas where there is no single sanitary standard for milk—the grade of milk they are to supply.

SERVE MILK COLD AND OFTEN AND OFFER CHOCOLATE-FLAVORED MILK

Two effective ways of encouraging children to drink more milk are to make cold milk available to them as often as practicable during the school day and to serve chocolate-flavored milk as well as plain whole milk.

Serving Milk Cold

Children drink more cold milk than milk served at room temperature, because milk is more palatable when it is cold. With good refrigeration, palatable milk can be served at any time during the day.

Equipment to keep milk cold need not be elaborate nor expensive—a dependable secondhand refrigerator has proved adequate for a small school. Other types such as bulk dispensers and coin-operated milk-vending machines are worth considering. School officials interested in installing these machines can learn more about their advantages and disadvantages from schools that are using them.

If there is no way to obtain refrigeration, attempts can be made to have the dairy deliver milk close to the times of serving.

Having Milk Available

Studies have indicated that children drink more milk when they can obtain it at various times during the day. A minimum goal is to have milk available at least three times a day, at mid-morning, at noon,



Fig. 1.—Under the policy of the National School Lunch Program, participating schools are required to serve a half pint of milk with each lunch. Children may also purchase additional milk or chocolate-flavored milk when it is made available.

and at mid-afternoon. Some schools report that large quantities of milk are drunk by children as they arrive or leave, especially by those who must walk or ride long distances to school. Coin-operated milk-vending machines may help to make milk more accessible in large schools, especially high schools.



Fig. 2.—Children drink more milk when it is served cold rather than at room temperature. Making milk available at intervals during the day also increases their consumption of it. This youngster favors chocolate-flavored milk.

Serving a Variety of Milk

Research shows that more milk is drunk by school children when they have access to chocolate-flavored milk as well as to plain whole milk. When the weather is cold, serving chocolate milk **hot** also encourages children to drink more milk.

If schools participating in the federal programs intend to serve chocolate-flavored milk, dairies should be told that state and local standards as to butterfat content that apply to plain whole milk also apply to chocolate-flavored milk.

Size of the containers may also affect the quantity of milk drunk. High school students, for example, may prefer one-third quarts to one-half pints.

THE DAIRY INDUSTRY CAN HELP

Both milk producers and milk dealers have much to gain from school milk programs. Immediately, a wider market is created for milk. Over the years, the school children who are now developing the milk-drinking habit are likely to become regular patrons and later encourage the habit in their children too.

It is to the interest of milk producers and dealers then to help with school milk programs. Dealers can deliver milk of the highest quality—fresh, cold, and with good flavor. They can help schools maintain the quality of the milk they deliver by aiding them in obtaining proper refrigeration and serving equipment. If a school, for some reason, cannot obtain such equipment, the dealer can plan a schedule that will bring cold milk to that school just before serving time. If a school has no milk program, producers or dealers can confer with that school's administrators to determine the reasons, and try to work out the problems involved.

Farsighted dealers do not overlook rural schools. Even if they make no immediate profit from serving these school children, such dealers recognize the long-time advantage to be gained. It may be possible for trucks picking up milk from farms for delivery to the plant to bring packaged milk back from the plant to some rural schools.

With a bulk dispenser or refrigerator, a rural school can do without daily deliveries of milk and still operate a milk program successfully

SUPPORT FOR THE PROGRAM

The success of school milk programs depends upon legislators, dairymen, people in civic organizations, school administrators, and all others interested in improving the health of children.

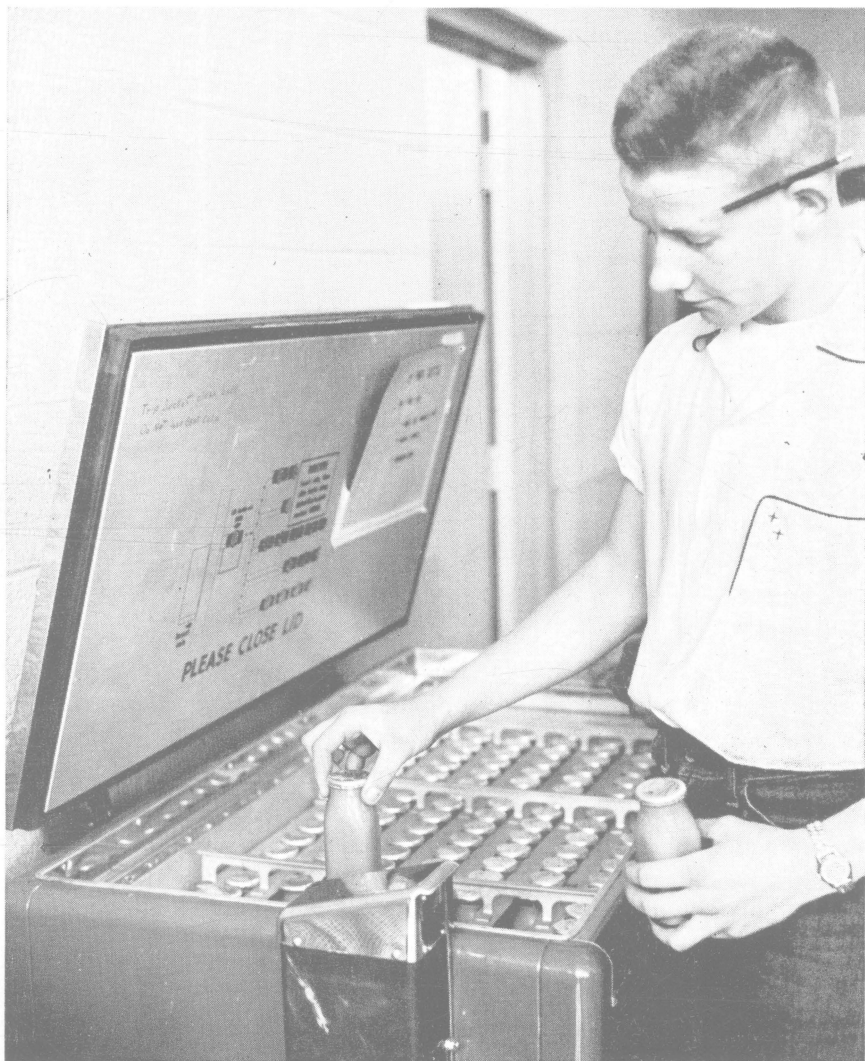


Fig. 3.—A coin-operated milk vending machine such as this boy is operating helps to increase the drinking of milk in schools. The availability plus the low cost go hand-in-hand to encourage greater milk consumption.

Federal Policies Are Sound

The policies of the federal school lunch and milk programs have proved sound and workable. The policy adopted under the National School Lunch Program of requiring one-half pint of milk to be served with each lunch is endorsed by dietitians because it helps to improve nutrition. The practice of partially reimbursing schools for whole milk used in preparing food eaten by children appears worth continuing.

The policy under the Special School Milk Program of partially reimbursing schools for all milk drunk by children during the school day or at scheduled school activities such as evening meetings has won wide acceptance. Research indicates that reimbursing schools at the rate of 3 cents for each half-pint under the Special School Milk Program stimulates milk consumption to a marked degree. The policy of reimbursing schools for chocolate-flavored milk at the same rate as for plain whole milk gains support from the fact that more milk is drunk when chocolate-flavored milk is also made available.

The system devised to enable schools to join the Special School Milk Program has also proved sound and workable. The requirements for participation are few, and the forms for reporting the amount of milk consumed are easy to fill out.

One reason that some schools have not joined the Special School Milk Program was the possibility that it might not last as the National School Lunch Program has lasted. Now that Congress has voted to continue the Special School Milk Program for another two years, more and more schools are likely to join that program.

The Dairy Industry Can Cooperate

The dairy industry can do much to help federal and state agencies responsible for administering these programs, and can encourage additional milk programs on the local level as well as more effective participation in schools that already have programs. One way dairymen can encourage more effective participation is to give certificates of merit or other kinds of recognition to schools that are doing an outstanding job. These awards are ordinarily based upon records of milk consumption, which may be obtained and analyzed in cooperation with school officials and extension workers in agriculture and home economics.

The Community Can Help

Farm organizations, parent-teacher associations, and all other civic groups concerned with the health of children can be effective in starting milk programs and in making them more successful. They can assist

in obtaining and financing needed equipment such as refrigerators, bulk dispensers, and milk-vending machines. They can aid in defraying the expense incurred by schools in giving milk free or at reduced prices to needy children. And they can recognize the services of schools personnel who are active in the programs.

School Personnel Can Contribute

Studies show that milk programs are most successful in schools whose principals and teachers have the greatest enthusiasm for them. How this enthusiasm is shown varies, of course, from individual to individual and from school to school. But in all cases it involves a recognition of the importance of the milk programs, the willingness to take on the added duties they entail, and the maintenance of a day-to-day interest in them.

AROUSE INTEREST IN THE PROGRAMS

Where school milk programs have had the widest success and brought the most good, people have been informed just how important milk is to the health of children, and just how the program makes better nutrition a daily practice in schools. School administrators and teachers have helped to spread this information. For example:

>School administrators have urged teachers to explain the nutritional benefits of milk to their classes, and have made that instruction meaningful by having milk available to the students.

>Teachers, besides having explained the value of milk in the well-balanced diet, have encouraged children to drink milk by periodically checking consumption at home as well as in school. Students in large schools have been found to need special encouragement because average milk consumption per pupil is usually less there than in small schools that serve milk.

State extension specialists and county extension workers in agriculture and home economics have also helped in many ways:

>State extension specialists in some states have organized educational programs in each county which included "leadership training" meetings for county extension workers, school personnel, and key people in parent-teacher associations and in the dairy industry. These programs have produced leaders for further informational programs in each locality.

>Both state extension specialists and county extension workers have provided materials for demonstrating the value of milk: text materials (extension circulars, mimeographs, newspaper and radio releases);

films (for television, auditoriums, and classrooms); and visual aids. They have also acquainted teachers with materials issued by dairy councils and dairy companies.

>County extension workers have interested community groups in school milk programs by explaining what advantages they offer to school children and the community as a whole.

THE STUDIES FROM WHICH THIS PUBLICATION STEMS

Increasing Milk Consumption in Schools. By S. W. Williams, G. G. Quackenbush, R. W. Bartlett, E. F. Baumer, and H. L. Cook. North Central Regional Publication No. 60 (Mich. Agr. Exp. Sta. Spec. Bul. 403.) 56 pp. August, 1955.

Information about the operation of school milk programs in the North Central Region. An analysis is included of data from four state studies of factors affecting participation in school milk programs and opportunities for increasing milk consumption in schools.

Student Participation and Use of Milk in School Lunches. By G. G. Quackenbush. Mich. Agr. Exp. Sta. Tech. Bul. 252. 36 pp. September, 1955.

A survey of milk programs in Michigan schools during October, 1953—conditions affecting rates of participation and reasons for some schools not serving milk.

A Program for More Milk in Schools. By R. W. Bartlett and Marie C. Harrington. Ill. Agr. Ext. Cir. 738. 20 pp. February, 1955.

Points out the importance of milk in a well-balanced diet, tells how school milk programs increase the consumption of milk, and recommends ways for making these programs more effective.

More Milk in Schools—Less Surplus Butter and Dry Nonfat Solids. By R. W. Bartlett. Unpublished data.

Summarizes studies of milk consumption in Chicago public schools for March, 1953, and gives reasons for differences among these schools in the average amount of milk drunk per student in school milk programs.

Milk Consumption by Students in Ohio Schools. By E. F. Baumer and Thomas Stout. Unpublished data.

A description of milk programs in a sample of Ohio schools in early 1954, and a study of the factors that influenced average milk consumption per pupil in those schools.

Ways to Increase Use of Milk in Wisconsin Schools. By Hugh L. Cook and Hugh L. Moore. Dept. of Agr. Econ., University of Wisconsin, Agr. Econ. 16. 75 pp. March, 1956.

Surveys of milk programs in Wisconsin schools, their effectiveness and potential for increasing milk consumption—for the 1953-54 and 1954-55 school years.

Case Studies on Pupil Response to Experimental Pricing of Milk—Madison and Milwaukee Schools. By Hugh L. Cook and Harlow W. Halvorson. Wis. Agr. Exp. Sta. Res. Bul. 190. 33 pp. January, 1956.

Description and findings of a controlled experiment in pricing milk to pupils in Madison and Milwaukee schools under the Special School Milk Program.

RESEARCH SHOWS

CHILDREN NEED MILK . . .

if their diet is to be well balanced

SCHOOL MILK PROGRAMS . . .

encourage children to drink more milk

SCHOOL MILK PROGRAMS ARE MOST SUCCESSFUL . . .

when education in nutrition makes clear that milk is needed in a well-balanced diet

when milk is sold to children at the lowest possible price

when milk is served cold and is available when the children have free time

when chocolate-flavored milk as well as plain whole milk is served

when school officials and local groups are active in supporting the school milk programs